

Claims

1. A catalyst bed comprising a physical mixture of catalytically active and catalytically inactive shaped bodies, wherein the catalytically inactive shaped bodies are hollow cylinders or annular pellets having rounded edges on the external rubbing surfaces, with the radius of curvature of the end faces being from 0.01 to 0.5 times the external diameter.
2. The catalyst bed comprising a physical mixture of catalytically active and catalytically inactive shaped bodies according to claim 1, wherein the catalytically active shaped bodies have rounded edges on the external rubbing surfaces.
3. A method of producing catalyst beds from catalytically active and catalytically inactive shaped bodies, wherein hollow cylinders or annular pellets having rounded edges on the external rubbing surfaces, with the radius of curvature of the end faces being from 0.01 to 0.5 times the external diameter, are used as catalytically inactive shaped bodies.
4. The use of the catalyst beds according to claim 3 in heterogeneously catalyzed fixed-bed processes.
5. The use of the catalyst beds according to claim 3 in exothermic gas-phase processes.
6. The use of the catalyst beds according to claim 3 in processes for the oxychlorination of ethylene to ethylene dichloride, in the oxidation of hydrogen chloride to chlorine (Deacon process), in the oxidation of methanol to formaldehyde (Formox® process), in the oxidation of o-xylene or naphthalene to phthalic anhydride, the oxidation of ethene to ethylene oxide, the oxidation of butane, butenes, butadiene or benzene to maleic anhydride or the oxidation of propane or propene to acrolein or acrylic acid.

AMENDED SHEET